SECTION 5: Setup Procedures

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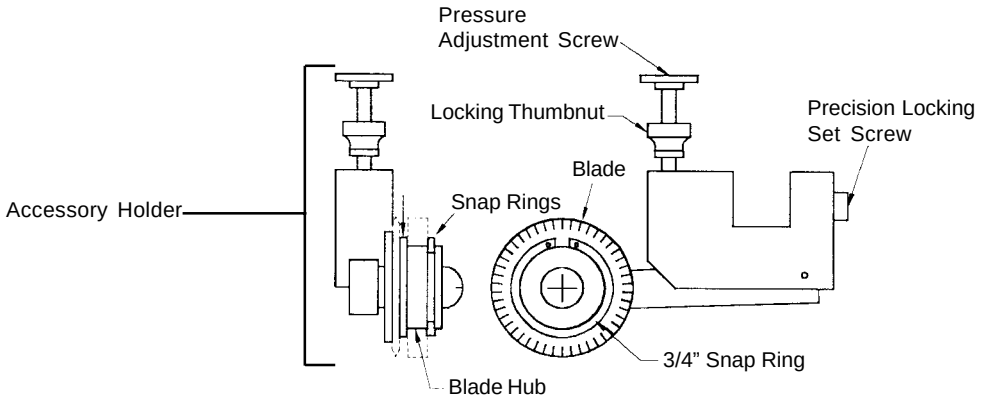
Setup Procedures

The PS8050 must be adjusted to accomodate your specific job requirements. Adjustments will depend upon type of stock being run, number of heads being used, and number of perf/slit/scores required.

1. Perforating/Slitting/Scoring

Installing a Perf, Slit, or Score Wheel

1. Remove the Accessory Holder from the machine.
2. Remove the Snap Ring from the Blade Hub with the supplied Ring Pliers and slide off the blade.
3. Place the new blade on the Blade Hub and reinstall the Snap Ring. Make sure that the Snap Ring sits completely in the groove on the Blade Hub in order to prevent any movement of the blade.
5. Reinstall the Accessory Holder.

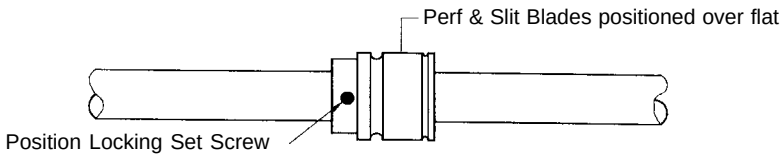


Perf/Slit Positioning

1. Using the small hexdriver, move the Boss Wheel to the approximate perforation or slit location.
2. Position the Accessory Holder so that the perf/slit blade is located over the flat surface of the Boss Wheel. Lock the holder in position by tightening the setscrew.

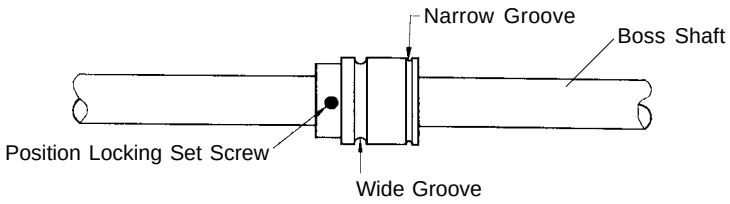
Note: In order to control the depth of a perf/slit, you must have back pressure. For this reason, it is critical that you position your perf/slit wheel over the flat of the Boss Wheel and not in a groove.

3. Tighten the Pressure Adjustment Screw located on the top of the Accessory Holder while turning the Handwheel on the non-operator side of the machine. When the perf/slit blade begins to turn with the Handwheel, stop tightening and run a few test sheets. Check perf/slit depth and make adjustments as necessary.



Score Positioning

1. Using the small hexdriver, move the Boss Wheel to the approximate score location. Do not lock down.
2. Position the Accessory Holder over the Boss Wheel so that the score blade is located either in the Wide Groove (if using a Wide Score Blade) or the Narrow Groove (if using a Narrow Score Blade). Lock the holder in position by tightening the setscrew.
3. Push the blade down into the appropriate groove and turn the Handwheel. This assures that the blade and groove are aligned properly. Lock down the Boss Wheel.
4. Set the depth of the score and run some test sheets. Adjust the depth of the score as necessary.



Is Your Perf/Slit/Score Line Straight?

Use a straight edge to check that the perf/slit/score line is straight. If it is not straight, use the following procedure:

1. Make sure the main tires are placed evenly across the sheet with one tire on the non-operator side.
2. Flip over about an inch of the lead edge and see if the perforation lines up. If it does not line up, double check placement of the Receiving-Tray Side Guides.

Are Your Sheets Feeding Square?

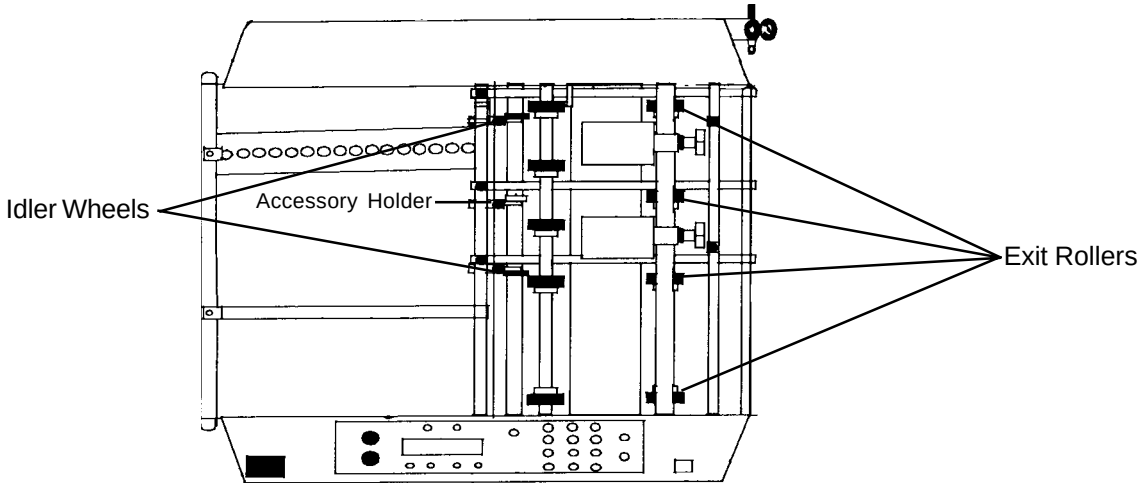
Feed a sheet into the machine using the Handwheel and compare the lead edge of the sheet with a straight edge in the machine such as the edge of the Boss Shaft. If the stock is not feeding square, use the following procedure:

1. Adjust the Register Guide Adjustment Screws. By turning these screws, you can adjust the pitch of the Register Guide and correct stock travel through the machine.
2. Fold over about 4" of the lead edge leaving the last one inch exposed and see if the perforation lines up. If it doesn't, check that the perf itself is straight. If the perf is not straight, the Main Rollers may need to be positioned more equally across the sheet. Also, check that the Feed Tires are applying equal pressure and adjust the Feed Pressure Adjustment Screws as necessary.

Note: The perforation will run away from the tighter Feed Tire. If the perforation runs towards the non-operator side, loosen the operator-side screw slightly and tighten the non-operator side. Do the opposite for a perforation that skews toward the operator side.

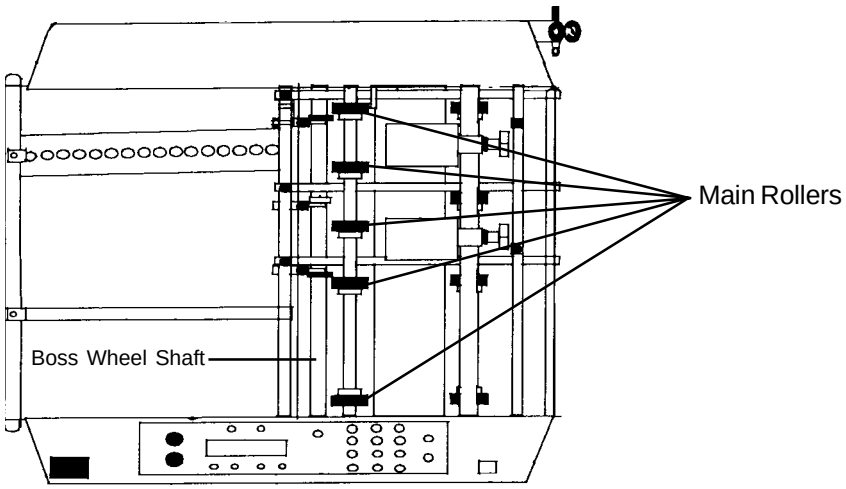
2. Idler Wheels

Accompanying the Accessory Holders on the keyed shaft are the Idler Wheel Holders. These holders should be positioned so that the Idler Wheels contact the stock 1 to 12 millimeters from the outside edges. The purpose of the Idler Wheels is to prevent the stock from skewing as it is being perfed/scored/slit.



3. Main Rollers

In this section of the machine, four adjustable Main Rollers ride on top of a long, bottom roller. Distribute the Main Rollers along the shaft so that one roller is at each end and the middle two run on the stock. Make sure not to load all rollers to one end of the shaft or you will encounter stock skew.

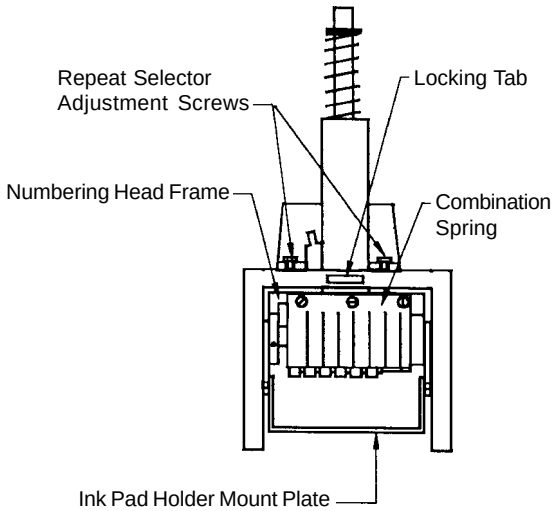


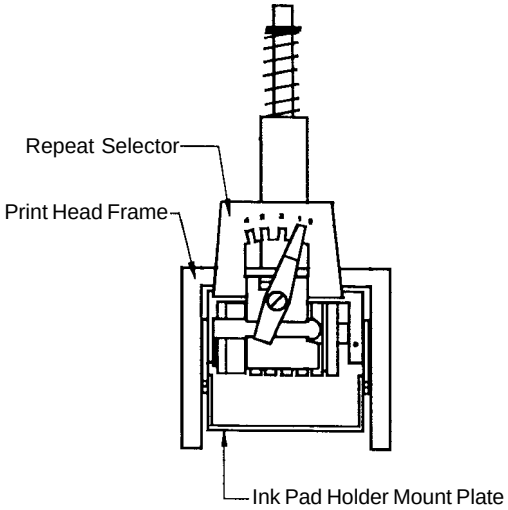
4. Ink Pads

Before starting a numbering application, ink pads must be installed. Use the following procedure:

1. Loosen the lower Hand Knob on the Drive Unit Mount Block and swivel the Drive Unit up. This will allow you better access to the Numbering Head itself.
2. Slide the Repeat Selector on the Numbering Head over to the “0” position.
3. Pull down the Numbering Head Frame. The Ink Pad Holder Mount Plate swings away exposing the Numbering Wheels.
4. Press in the Locking Tab that sticks out from the top of the Print Head Frame. The Locking Tab will drop into a groove on the Numbering Head Shaft and lock the head in position. Make sure not to pull the Numbering Head Frame down too far or the Repeat Selector may jam the head.
5. Remove an Ink Pad from its package by grasping the two plastic fingers on its backside.
6. The Inkpad must be conditioned before installation. Find a piece of coated stock (because it is less absorbent) and place the Inkpad on it felt-side down. Press down hard while dragging the Inkpad to compress the felt.
7. Once the pad is conditioned, gently squeeze the two plastic fingers together and slide the Inkpad into the groove on the Ink Pad Holder Mount Plate with the ink-reservoir side of the pad sliding in first. Release the tabs.

Note: Conditioning is done to avoid using an Inkpad that may be swollen with ink and therefore thicker than necessary. Mounting a swollen Inkpad on the Numbering Head could result in splattering or fat images.





5. Setting the Starting Number

Use the following procedure to set the starting number on the Numbering Head:

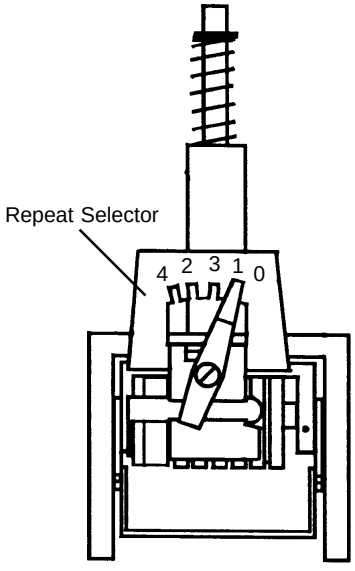
1. Loosen the Lower Hand Knob on the DriveUnit Mount Block and swivel the Drive Unit up. This will allow you direct access to the Numbering Head.
2. Pull down the Numbering Head Frame. The Ink Pad Holder Mount Plate swings away exposing the Numbering Wheels.
3. Press in the Locking Tab that sticks out from the top of the Print Head Frame. The Locking Tab will drop into a groove on the Numbering Head Shaft and lock the head in position. Make sure not to pull the Numbering Head Frame down too far or the Repeat Selector may jam the head.
4. Each individual Numbering Wheel can now be rotated to the appropriate starting number using the Change Stylus provided in the accessory kit.

Note: The standard head counts backwards so the number you start with should be the last number required by your job.

If you do not require all the digits to print i.e. 0097 is desired instead of 000097, the last two Numbering Wheels can be dropped from profile and locked down. To do this, rotate the Numbering Wheel to the "9" position. Push down on the "9" and begin to turn the wheel slightly. When the correct position is reached, the "9" will automatically drop down below type height. To restore a dropped wheel to its regular print position, rotate the wheel in its normal direction until the wheel pops out of its sunken position.

6. Repeat Selector

Numbering Heads have a Repeat Selector which allows a number to be repeated from one to four times (see chart below). The repeat functions are achieved by a mechanical ratchet action.



Position	Action
0	number will not change (use during job setup)
1	number increments with every stroke
2	number repeats twice before incrementing
3	number repeats three times before incrementing
4	number repeats four times before incrementing

7. Locating the Numbering Heads

To adjust the lateral position and rotation of the Drive Unit, use the following procedure:

1. Loosen the Anti-Pitch Block setscrew using the large hexdriver.
2. Loosen the lower Hand Knob on the Drive Unit Mount Block and slide the Drive Unit into the desired location.
3. Slide the Anti-Pitch Block over against the Drive Unit.
4. Tighten the Hand Knob and the Anti-Pitch Block setscrew to lock the Drive Unit in place.

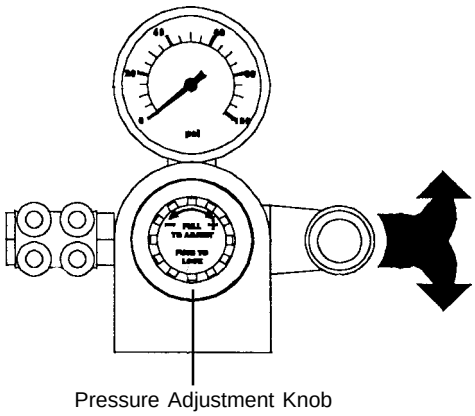
Note: The Anti-Pitch Block and Drive Unit Mount Block work together when locating a number position. If the number position is slightly off, you can loosen one of the blocks and move it over the appropriate distance using the fastened block as a reference point. Also, when replacing the Inkpad, the Anti-Pitch Block can be left in position as a reference so that the Drive Unit may be returned to the same location.

4. To adjust the rotation of the Numbering Head, loosen the Rotation Lock Screw on the Numbering Head Mount Block. Rotate the Numbering Head to the desired orientation and tighten the Rotation Lock Screw.
5. Before starting a job, make sure that the head has been returned to the print position and all knobs have been tightened. It is advised that you run a few test sheets using NCR to check the strength and quality of the crash impression.

8. Impression Strength

Check the bottom sheet of the NCR test set to see if the impression strength is adequate. Impression strength can be increased by turning the Impression Control Dials clockwise.

Note: Since carbonless impressions are created through a development process similar to that of a photograph, they tend to appear much lighter when they are fresh (it takes about twenty minutes for an impression to reach 80% of its full color and about 24 hours for the entire darkening process to be completed). For this reason, look more for a level impression and minimal or no embossing of the stock than at impression darkness.



Pressure Adjustment Knob

Since the Numbering Heads are pneumatically driven, impression strength can also be regulated through air pressure level. Whether using shop air or a stand-alone compressor, machine air pressure can be adjusted at the Pressure Adjustment Knob. The optimum pressure setting is 45-60 psi. If your application has many numbering impressions, you may need to increase the air pressure to maintain a consistent impression.

5. Once your number has been set, slide the Repeat Selector over to the “0” position (this will keep the number from cycling when test sheets are run).

6. Pull the Numbering Wheel Frame downward to release the Locking Tab and allow it to return to its rest position.

Caution: The Numbering Wheel Frame is spring loaded. Once you release the locking tab, the Numbering Wheel Frame will spring back quickly. Make sure that you keep your fingers clear of the inner workings of the Numbering Head.

7. Now you can pivot the Drive Unit back to the print position and re-tighten the Lower Hand Knob.

9. Flatness of Impression

Like impression strength, flatness of impression can be checked by looking at the bottom sheet of an NCR test set. Adjustments should be made using the procedures described below.

Note: Do not use the inked impression to judge flatness. It will not adequately show whether the impression is truly flat.

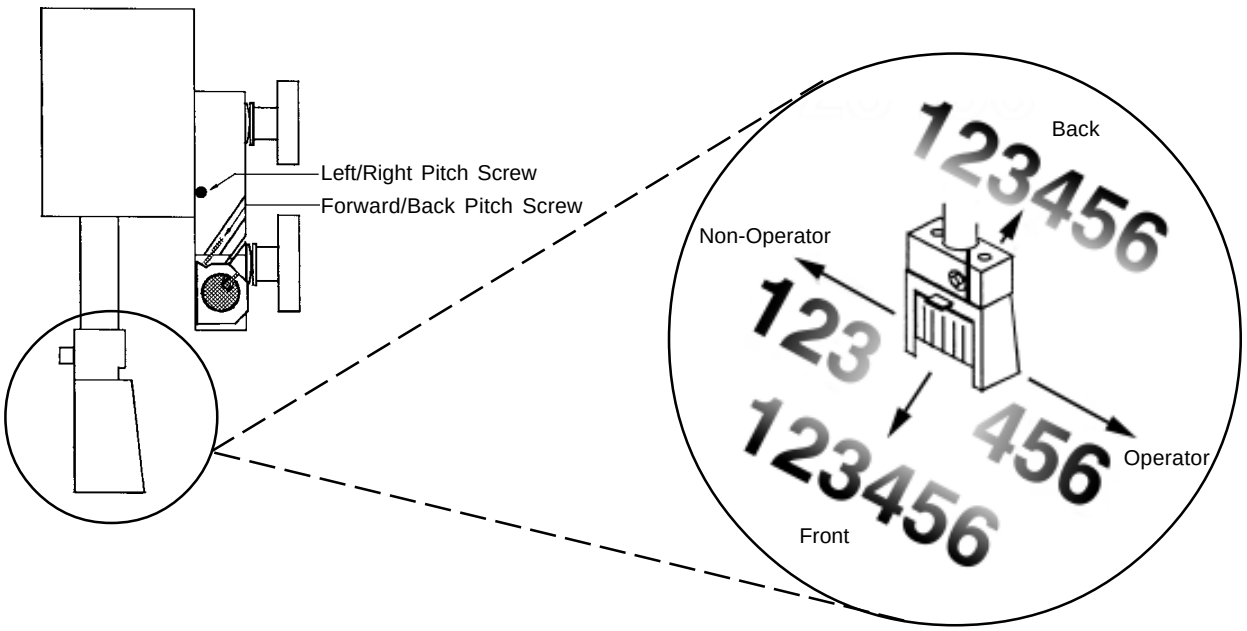
Uneven Side-to-Side Impression

1. Determine which direction the Numbering Head must pivot towards to correct the impression.

2. Loosen the Top Hand Knob on the Drive Unit Mount Block.

3. Adjust the Left/Right Pitch Screw. Turn clockwise to move towards the non-operator side of the machine, counter-clockwise to move towards the operator side.

4. Tighten down the Top Hand Knob to lock the Numbering Head in this position.



Uneven Front-to-Back Impression

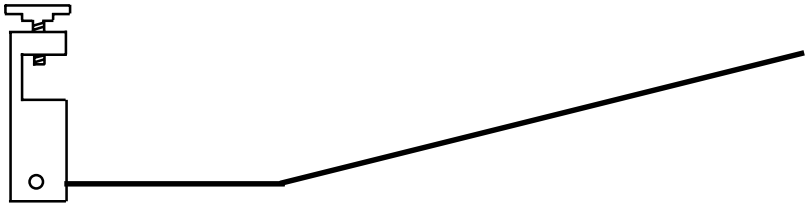
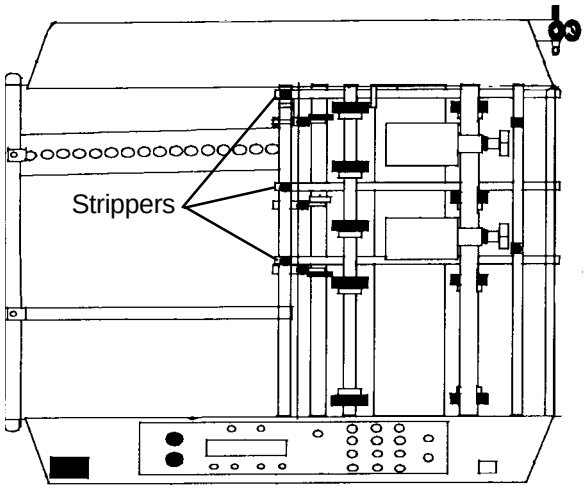
1. Determine which direction the Numbering Head must pivot towards to correct the impression.
2. Loosen the Bottom Hand Knob on the Drive Unit Mount Block.
3. Adjust the Forward/Back Pitch Screw. Turn clockwise to move towards the front of the machine, counter-clockwise to move towards the rear.
4. Tighten down the Bottom Hand Knob to lock the Numbering Head in this position.

Continue to run NCR test sets until a flat impression has been achieved.

10. Stripper Assemblies

Stripper Assemblies should be mounted with their shaft side down on the same square, keyed shaft as the Accessory Holders. Their purpose is to keep the stock flat so that it does not catch on a Numbering Head as it travels through the machine. Position the Stripper Assemblies close to the Numbering Head and to areas where a perf/slit/score is being performed.

Caution: Do not position the Stripper Assemblies directly beneath the Numbering Head or damage to the Numbering Head Wheels may occur!



If you experience double images when numbering, it is possible that the Stripper Assemblies are not providing enough pressure to keep the stock flat. If this occurs, the shafts of the Stripper Assemblies can be adjusted down to create more pressure on the paper.